I have been a licensed Amateur Radio operator since 1946, and have worked professionally in the wireless communications industry for almost 50 years. Based on my knowledge and experience in the field of high frequency (HF) communications, I am deeply concerned over the effect widespread implementation of Broadband over Power Lines (BPL) technology will have on HF communications in general and my Amateur Radio activities in particular.

I also equally concerned over the effect my Amateur Radio and other HF transmitter operation will have on nearby users of the BPL technology.

Concerning the first issue, well-established theory and practice has shown that unshielded conductors carrying radio frequency energy of wavelengths much shorter than the conductor's length effectively act as radiators – antennas – so that this RF energy will be radiated as well as conducted. Even very-low-level signals thus radiated can be propagated to great distances. With a transmitter power of two watts or less, using frequencies in the 7, 14, 21 and 28 MHz Amateur bands, I have made thousands of contacts with fellow Amateurs in more than 100 nations throughout the world.

Thus not only can BPL adversely effect nearby HF users, but the cumulative effect of hundreds or thousands of U.S. BPL systems, radiated worldwide, could be a blanket of electronic smog that would negatively impact HF communicators worldwide… including the U.S. military!

With respect to the second issue, my knowledge and experience lead me to believe that interference to BPL system users by licensed communicators would surely become as serious an issue as the converse. My Amateur transmitter is capable of and is frequently operated at up to 1000 watts output on the 1.8, 3.5, 7, 14, 18, 21, 24, 28, and 50 MHz Amateur bands. It is without question that, should BPL be established in my neighborhood, my operation at that or even much lower power levels could seriously degrade or even totally disrupt service to any nearby users of BPL.

I am aware that Part 15 users are required to defer to licensed operators in case of interference by or to the Part 15 users. However, in the real world how long will the operators of a BPL provider - or his customers - tolerate being shut down whenever an Amateur objects to BPL interference or decides to get on the air and disrupts all his neighbors internet access? The Rules may favor the Amateur; politically he's off the air!

Unless and until these issues can be truly resolved, the widespread implementation of BPL technology in the United States has the potential for being a national if not international disaster. I urge the Commissioners to delay further action on BPL until much more research on its true impact can be done.

Thank you for hearing my plea.

Joseph Schroeder Amateur Radio W9JUV